

TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE

WYOMING

SOIL CONSERVATION SERVICE

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Subject: PRONGHORN*

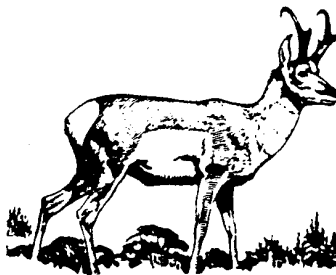
General

The pronghorn (Antilocapra americana) is most often found in grassland prairies and sagebrush flats. They are sometimes found in areas with scattered trees and large openings.

Food Requirements

Foods utilized by the pronghorn vary seasonally depending on the availability, palatability, and succulence of vegetation. Individual needs and preferences also influenced the animal's diet in Colorado.

Browse plants were found to be important foods for pronghorns in southeastern Montana where various species of sage, especially big sagebrush (Artemisia tridentata), were utilized. Other browse species used included bitterbrush (Purshia tridentata), saltbush (Artiplex spp.), snowberry (Symphoricarpus spp.), greasewood (Sarcobatus spp.), and rabbitbrush (Chrysothamnus spp.). Consumption of browse by pronghorn is usually highest during the fall (70 percent of diet) and winter (55 percent of diet) seasons. Consumption of forbs is highest during spring (50 percent of diet) and summer (65 percent of diet). The higher consumption of browse is associated with its higher palatability and nutrient content during fall and winter as compared to forbs and grasses.



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*Information taken from Ecoregion M3113 Handbook and Habitat Suitability Index Models, Wildlife Species Narratives (literature searches), U.S. Fish and Wildlife Service, various dates between 1978-1984.

Forbs commonly eaten include larkspur (Delphinium spp.), locoweed (Astragalus spp.), goldenweed (Aplopappus spp.), soapweed (Yucca spp.), and onion (Allium spp.). Grasses are also eaten, depending on their availability, palatability, and nutrient value. Utilization of grasses in Montana most often occurred during the "green up" period. Cacti (puntia spp.) were eaten sparingly throughout the year. Cultivated crops such as wheat and alfalfa were also eaten when available.

Water Requirements

Water consumption for the pronghorn in western Utah was found to be about 2 to 3 qts. (1.89 to 2.84 l) of water per day. Water consumption is closely related to the amount of succulent vegetation in the pronghorn's diet. Water requirements can be satisfied by abundant vegetation with a moisture content of 75 percent or greater.

The pronghorn antelope will drink water daily if it is available. Snow may be substituted for free water during the winter months. Pronghorns in Colorado were reluctant to drink water out of stock tanks, although they did drink overflow water from the tank that fell onto the ground.

During lactation, the water requirements of the doe are probably greater as compared to bucks or non-lactating does. Available standing water or plentiful succulent vegetation is necessary near kidding grounds to satisfy these higher water requirements.

Cover Requirements

During summer the shade of isolated junipers, mahoganies, and sagebrush shrubs are frequently used.

Open rolling country provides optimal cover for pronghorns. Pronghorns use their running ability and keen eyesight to escape predators. The shrub canopy cover of pronghorn habitat in Montana varied between 10 and 24 percent. Extremely brushy ranges were less desirable for the pronghorn antelope because they interfered with the animal's vision and running ability. Antelope observed in areas of restricted visibility as in tall brush or timber appear very nervous and uneasy. They are more content and seem to prefer bench lands and flats where their view is not so limited.

Depressions, ridges, rims, and breaks occurring throughout the open prairie are used for cover by the pronghorn. This type of cover is most often used for thermal protection in winter to shelter the animal from severe winds during winter blizzards.

Reproductive Requirements

Optimal pronghorn kidding grounds are found in basins surrounded by a low ridge of hills where standing vegetation averages 9 to 18 inches (22.5 cm to 45.0 cm) tall. Low ground cover enables the does to observe the location of their young and provides excellent camouflage for the fawns. The basin type of topography also provides the does with good visibility when observing the young.

Special Habitat Requirements

Foraging areas free of snow are necessary for the pronghorn during severe winters. When their normal feeding grounds became snow covered, pronghorns move to steeper ridges where stands of vegetation are more exposed.

Interspersion Requirements

Grassland and sagebrush vegetative types are preferred by the pronghorn. Movement between these two vegetative types in Montana usually occurred when snow covered the ground. Home range for the pronghorn in the winter in Montana varied from 729 acres (291.6 ha) for young to 3,542 acres (1,416.8 ha) for adults. The size of the home range was found to depend on the topography, physical barriers, and amount of available food in the area.